

CLAIMS:

1. A high-pressure discharge lamp (1) with a substantially elongate bulb (1) which has two neck regions (11, 12) and a vacuumtight discharge chamber (13) in a central position, characterized in that at least one neck region (12) is provided at least partly with a reflection layer (7).

2. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that the reflection layer (7) reflects radiation in the visible and infrared spectral ranges.

3. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that the reflection layer (7) is provided on the outside of the bulb (1) in the neck region (12).

4. A high-pressure discharge lamp (1) as claimed in claim 3, characterized in that the reflection layer (7) is a dielectric interference filter or a layer of a metal material or a metal oxide.

5. A high-pressure discharge lamp (1) as claimed in claim 4, characterized in that the reflection layer (7) is provided in the neck region (12) over a width of at most 10 mm measured from the start of the bulb (1).

6. A high-pressure discharge lamp (1) as claimed in claim 4, characterized in that the dielectric interference filter is formed by an optical multilayer system comprising layers of alternating high and low refractive index, in particular made of metal oxide.

7. A reflector lamp with a reflector (2) and a high-pressure discharge lamp (1) arranged in the reflector (2) along the optical axis (4) and having a substantially elongate bulb (1) which has two neck regions (11, 12) and a vacuumtight discharge chamber (13) in a central position, characterized in that the neck region (12) facing the reflector opening is at least partly provided with a reflection layer (7).

8. A reflector lamp as claimed in claim 7, characterized in that a cold-light mirror is arranged on the inside of the reflector (2), and the reflection layer (7) is formed by a metal oxide, in particular of zirconium oxide, or a dielectric interference filter.

5 9. A reflector lamp as claimed in claim 7, characterized in that a metal reflector layer (3) is arranged on the inside of the reflector (2), and in that the reflection layer (7) is made of a metal material, in particular of aluminum, or is a dielectric interference filter.

10 10. A projection system with a high-pressure discharge lamp (1) as claimed in any one of the claims 1 to 6 or a reflector lamp as claimed in any one of the claims 7 to 9.

TOGETHER